# THE LEAD SYSTEMS INTEGRATOR: A TRANSFORMATIONAL MANAGEMENT APPROACH FOR THE OBJECTIVE FORCE

MG Joseph L. Yakovac Jr. and COL William R. Johnson

### Introduction

The Army's transformational vision, with its end goal of an Objective Force, is—quite simply—about change. Long before the tragic events of September 11, 2001, Army Chief of Staff GEN Eric K. Shinseki's vision recognized the change in threats to our Nation, the change required by our fighting forces to counter those threats, and the change required for the acquisition process to achieve the end goal in the shortest time-frame possible.

The end goal is an ambitious one that requires an equally visionary management approach—a trusted partnership between government and industry. The industry partner will function as the government's lead systems integrator (LSI).

# **Traditional Procurement**

Traditionally, the procurement of a platform or system for the government results in award of a contract to a single prime contractor who builds what is possible and subcontracts the rest. The relationship between the government and its prime contractor has, more often than not, been one of "benign adversaries." It was merely a working relationship providing the necessary checks and balances to ensure that a system was brought in

on time and within its budget. Quite often, however, as the project was moving into the field, new technologies and improvements emerged. Thus, a new and often lengthy procurement cycle was commenced to upgrade the contract.

# LSI Approach

While LSI is a management approach, not a type of contract, it has a significant impact on how procurement happens within a program the size and scope of the Future Combat Systems (FCS). The LSI approach, which is being formally used for the first time in the FCS Program (with Boeing and Science Applications International Corp. (SAIC) as LSI), tackles head-on some of the assumptions and constraints of the traditional procurement approach. First and foremost of these is the challenge of designing and developing a large-scale system-ofsystems program versus a single platform or system.

FCS is much more than new manned ground vehicles. A networked system-of-systems, the FCS is the backbone of the Objective Force. It will serve as the core building block within all maneuver unit of action echelons to develop the overmatching combat power, sustainabil-

ity, agility, and versatility necessary for full-spectrum military operations. This system-of-systems has, at its center, an advanced communications infrastructure that is designed to be interoperable—across the Services, agency boundaries, and borders—to our allies around the world.

## **FCS Challenges**

Overlaying the technology challenges of FCS is an equally demanding schedule requiring that the first unit equipped be ready in 2008, followed by an initial operational capability in 2010. Ambitious? Yes. Achievable? Absolutely—if all stakeholders and partners are working toward a common goal.

A primary LSI responsibility for FCS is to provide the big-picture, system-of-systems architecture oversight and vision. The LSI must keep this "40,000-foot-view" of all systems, subsystems, and components while managing a team of as many as 100 suppliers. Further, the LSI must keep team members and their constituencies engaged in striving toward the common end goal of an Objective Force.

One of the most significant achievements of this process will be the government's ability to get the best technologies to the field and

4 Army AL&T March-April 2003

into the hands of soldiers more quickly than would be possible under more traditional approaches. The LSI can, and will, procure and incorporate new technologies as they emerge. Private industry has the ability to do this quicker and more effectively than the government. In fact, the FCS plan already includes the next round of Block II and follow-on upgrades. This spiral development ensures that the soldier is continuously provided the very best equipment.

# **LSI Responsibilities**

The LSI is also the honest broker searching out the best of industry for the FCS Program. Quite obviously, no one company can provide the domain expertise needed for a program as broad and comprehensive as FCS or a vision as far-reaching as the Objective Force. Thus, the LSI seeks industry's best for each system, subsystem, and component. This is accomplished through a series of broad industry announcements (based on the government Broad Area Announcement process) and competitions. By encouraging competition and commonality across the program, the LSI will bring the best to the program while also achieving a certain degree of economy of scale.

The LSI also has the responsibility to ensure a level playing field that allows fair competition among potential suppliers. In the case of FCS, the LSI Web site provides an equal portal for all companies wishing to participate in the program, including their own. Both Boeing and SAIC have firewalls in place that require other divisions of their own companies to enter the portal via the same process as outside suppliers. This firewall approach is essential to the LSI process. For LSIs to truly become an extension of the government and its trusted partner, they must set aside their corporate hats and don a government one.

# **LSI Challenges**

The challenges to an LSI approach are significant, requiring cultural changes for both government and industry. On the industry side, an LSI must step outside its corporate identity; this represents an enormous cultural shift. Yet achieving a true partnership with government and pulling together other industry team members will more likely be successful if LSIs function without corporate logos and branding across their work products. They must remember that they are no longer the corporation, but rather a representative of the government.

Cultural changes within the government are every bit as significant as those of industry. Relationships must be formed with trusted partners rather than benign adversaries. In addition, there must be open channels of communication with industry counterparts. Further, the government must relinquish parts of the procurement process (but not oversight) to its LSI.

It would be naïve and irresponsible to think that these cultural changes will happen easily or painlessly. Ongoing efforts are required from all sides to educate, internally and externally, the importance of these paradigm shifts. This education process is the responsibility of both the government and the LSI. Together, they must work to encourage other industry partners to accept the LSI role and support the common goal of meeting America's need for an Objective Force. There must be an environment of shared responsibility and "buy-in" on the part of companies involved.

LTG John M. Riggs, Director of the Objective Force Task Force, has exhorted industry many times on the need to work together. He also said that the American defense industry can do anything it sets its sights on achieving, but that the only way the Objective Force can become a reality, is for all of industry to set aside its squabbling and equally strive to achieve that goal. Similarly, the vari-

ous government agencies involved must continue to work together, across territorial boundaries, to reach that same goal.

### Conclusion

Several months into the FCS Program, the LSI approach is working well. There are, and always will be, bumps and hurdles to overcome. The serious dedication of all involved is essential to success. Because the LSI approach represents the potential for a new paradigm in all arenas, other Services and agencies are watching the process unfold. Meeting the Army's transformation goals requires new ways of thinking about how programs are procured and managed, and the LSI approach does just that.

MG JOSEPH L. YAKOVAC JR. is the Program Executive Officer, Ground Combat Systems, Warren, MI. He has a B.S. degree from the U.S. Military Academy and an M.S. in mechanical engineering from the University of Colorado. His education also includes Infantry Officer Basic Course, Armor Officer Advanced Course, U.S. Army Command and General Staff College, and the Industrial College of the Armed Forces.

COL WILLIAM R. JOHNSON is the Army Project Manager, Objective Force, as well as the Defense Advanced Research Projects Agency's Program Manager, FCS. He has a B.S. in aeronautical engineering from Florida Institute of Technology, an M.S. in systems management from the University of Southern California, and a Ph.D. in human engineering from the University of Central Florida. He is also a graduate of the Industrial College of the Armed Forces, Defense Systems Management College's Advanced Program Managers Course, and the U.S. Army Command and General Staff College.

March-April 2003 Army AL&T 5